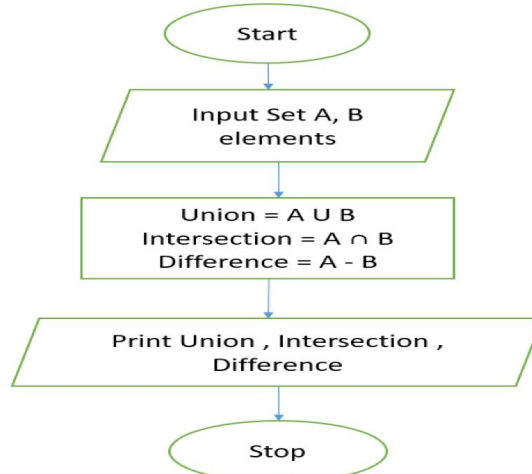


PROBLEM 4.1.1

Flowchart



Algorithm

Start

Read space-separated integers for **Set A**.

Read space-separated integers for **Set B**.

Convert the inputs into two sets: Set A and Set B.

Find the **Union**, Intersection and Difference of Set A and Set B.

Display the **Union**, Intersection and Difference.

Stop

The screenshot displays a web-based coding interface for '4.1.1. Set Operations'. The left sidebar contains the problem description and input/output formats. The main editor shows a Python script that reads two sets of integers, calculates their union, intersection, and difference, and prints the results. The output window shows the execution results for the input 'Set A: 1 2 3 4' and 'Set B: 4 5 6 7'.

Problem Description: Write a Python program to perform union, intersection and difference operations on Set A and Set B.

Input Format:

- First Line prompts "Set A: " followed by space-separated list of integers for Set A.
- The second line prompts "Set B: " followed by space-separated list of integers for Set B.

Output Format:

- The first line prints "Union: " followed by the union of Set A and Set B.
- The second line prints "Intersection: " followed by the intersection of Set A and Set B.
- The third line prints "Difference: " followed by the difference of Set A and Set B.

Python Code:

```
1 set_a=set(map(int, input("Set A: ").split()))
2 set_b=set(map(int, input("Set B: ").split()))
3
4 union_set = set_a | set_b
5 intersection_set = set_a & set_b
6 difference_set = set_a - set_b
7
```

Output:

```
Set A: 1 2 3 4
Set B: 4 5 6 7
Union: {1, 2, 3, 4, 5, 6, 7}
Intersection: {4}
Difference: {1, 2, 3}
=== YOUR PROGRAM HAS ENDED ===
```